



CO₂ SEQUESTRATION AND ENHANCED OIL RECOVERY

Objective

The Rocky Mountain Oilfield Testing Center (RMOTC) will play a significant role in carbon dioxide (CO₂) sequestration and enhanced oil recovery technology development and field demonstration. RMOTC completed a scoping engineering study on Naval Petroleum Reserve No. 3 (NPR-3) enhanced oil recovery potential in the summer of 2001. More recent studies indicate sequestration would also be an excellent use of NPR-3 resources beyond their economic life in conventional production.

Enhanced Oil Recovery

Western and Central Wyoming contain an enormous resource base of CO₂. In addition, many producing oil fields with good CO₂ enhanced oil recovery potential are located in the major basins of Wyoming. A pipeline has recently been completed by Anadarko Petroleum Corporation to transport up to 250 million cubic feet per day of CO₂ from Bairoil, Wyoming to the Salt Creek Field, adjacent to NPR-3 and RMOTC.

Experience

RMOTC staff has extensive experience in gas injection for pressure maintenance and enhanced oil recovery operations. RMOTC recently helped coordinate the creation of a Rocky Mountain-based regional partnership in CO₂ research and field testing, and is a key participant in a new state-sponsored initiative in enhanced oil recovery/increased oil recovery research and development. NPR-3 has the core characteristics for long-term activity in both CO₂ sequestration and enhanced oil recovery projects.

Stakeholders

Power plant operators, oil and gas companies, pipeline operators, carbon offset markets, industry groups such as Interstate Oil and Gas Compact Commission, and environmental organizations are primary industry stakeholders. Federal laboratories and state and federal regulatory agencies are viewed as the primary governmental stakeholders. Other relationships are being developed, including regional sequestration partnership members, National Energy Technology Laboratory, major Wyoming CO₂ producers, regional and national educational and research institutions, and operators of Wyoming CO₂ enhanced oil recovery candidate fields.

Contact

For more information contact RMOTC toll free at 888.599.2200, or visit our website at www.rmotc.com.



Sequestration

Fossil fuels will remain the mainstay of energy production well into the 21st century. Availability of these fuels to provide clean, affordable energy is essential for the prosperity and security of the United States. However, increased atmospheric concentrations of CO₂ are expected unless energy systems significantly reduce the carbon emissions to the atmosphere. To stabilize and ultimately reduce concentrations of this greenhouse gas, it will be necessary to employ carbon sequestration — carbon capture, separation, and storage or reuse.

